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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,517

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Refael Aharon

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EXAMINER

CHEN, CATHERYNE

ART UNIT

PAPER NUMBER

1655

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,517

Applicant(s)

AHARON, REFAEL

Examiner

CATHERYNE CHEN

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,9,12-14,16,17 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,9,12-14,16,17 and 20-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

The Amendments filed on Feb. 14, 2007 has been received and entered. Currently, Claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 are pending. Claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 are examined on the merits. Claims 2, 7, 10-11, 15, 18-19 are canceled.

Election/Restrictions

Applicant's election of the species labiatae family in Claim 8 in the reply filed on April 26, 2007 is acknowledged.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davey et al. (Anal. Biochem., 1996, vol. 239, pages 8-19), Laugham, Jr. et al. (US 6270723 B1), Rooks et al. (US 2004/0265451 A1), Bracco et al. (US 4352746), and Shibanaï et al. (US 4732759).

Davey et al. teaches pulverizing plant tissue in liquid nitrogen, extracted in 3% metaphosphoric acid, centrifuged, pass through cartridge, then eluate is injected (Methods). However, it does not teach freeze-defrost cycles, plant materials, Labiatae family, natural colorant, flavoring, aromatic, freeze drying, and micron size.

Laugham, Jr. et al. teaches sterilizing procedure of freezing and thawing (column 1, lines 51-54), where the material being sterilized can be a foodstuff, a pharmaceutical preparation (column 2, lines 61-64) at temperature from about -40 to about 95 degree Celsius (column 2, lines 15-17).

Rooks et al. teaches freezing fruit and grinding the frozen material into particles having a size less than 750 microns (paragraph 0004) to make food powders such as beverages, natural coloring (paragraph 0037). Water may be removed from the powder by freeze drying the powder (paragraph 0035).

Bracco et al. teaches ground vegetable material from leaves, flowers, fruits, roots, rhizomes, plants from Labiatae family, rosemary, sage, origanum, marjoram, thyme (column 2, lines 8-23), where substances are extracted with

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organic solvents or oils (column 1, lines 36-38), then the substances are used for food such as milk powder, cosmetic products (column 5, lines 36-38, 48).

Shibanai et al. teaches medicinal herbs used in cosmetics produced by freezing method (column 2, lines 54, 57-58) from lavender and chlorophyll (column 5, lines 13, 18, 21).

The references also do not specifically teach process claimed by applicant. These processes are well known in the art to be acceptable means of processing plant materials and sterilizing the product. Repeated freezing and thawing cycle to extract a liquid and solid from the plant material is an efficient way to extract. Upon noticing that the plant material is not consistently grinded, it would be reasonable to repeat the process so as to increase yield of the extract from the plant material. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the repeated freeze-thaw methods taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant. In addition, the size of the plant solid affects the extraction and freezing processes. The smaller the particle size will increase the extraction surface and decrease the time to freeze the material. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the particle sizes taught by the references in the claimed forms would be

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successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant.

The references also do not specifically teach performing the process in the time span and temperature range claimed by applicant. The process in the time span and temperature range is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Thus, optimization of general conditions is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal process in the time span and temperature range to use in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of ingredient amount would have been obvious at the time of applicant's invention.

The references also do not specifically teach process claimed by applicant. These processes are well known in the art to be acceptable means of processing plant materials and sterilizing the product. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the repeated freeze-thaw methods taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant.

In addition, the size of the plant solid affects the extraction and freezing processes. The smaller the particle size will increase the extraction surface and decrease the time to freeze the material. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the particle sizes taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant.

The references teach process for plants. Labiatae family are plants. Therefore the methods use to process the plants can be transferred to the Labiatae family plants. This reasonable expectation of success would motivate the artisan to use the process taught in the reference composition. Thus, using Labiatae family plant is considered an obvious modification of the references.

In cosmetics, chlorophyll is used as coloring matters. Plants have chlorophyll. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the chlorophyll of plant materials into cosmetics taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to combining the chlorophyll of plant materials into cosmetics as taught by the reference in the forms claimed by applicant.

Conclusion

No claim is allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catheryne Chen whose telephone number is 571-272-9947. The examiner can normally be reached on Monday to Friday, 9-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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